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10/542,971	04/19/2006	Jensen Peter Akkerman	09424.0240USWO	1961
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EXAMINER				
BENNETT, JENNIFER D				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/542,971

Applicant(s)

AKKERMAN ET AL.

Examiner

JENNIFER BENNETT

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to amendments and remarks filed October 15, 2009. Claims 1, 3-9, and 11-15 are currently pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 6-8, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Manique et al. (US 5523560).

Re claim 1: Manique teaches method for inspecting packaging for a liquid product (abstract and fig. 7), comprising: setting a packaging into rotation (col. 3, lines 17-23), irradiating the packaging during the rotation with radiation of a predetermined wavelength (col. 6, lines 45-50), making at least one series of at least two two-dimensional recordings (col. 3, lines 38-51) of at least a part of the content of the packaging during the rotation with an image recording device (632) suitable for making two-dimensional recordings at the predetermined wavelength (the unfolded images are two dimensional representations of the one dimensional line scans), wherein the packaging is situated in substantially the same rotational position relative to the recording device during successive two-dimensional recordings of the series (col. 3, lines 31-37), and wherein the

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packaging is maintained in rotation during the successive two-dimensional recordings of the series (col. 4, lines 1-28).

Re claim 3: Manique teaches method, wherein successive two-dimensional recordings of the series are made with an intervening time interval of a predetermined duration (col. 4, lines 23-28, there are multiple successive scans for several unfolded images there would be some amount of time interval in between each successive scan and several unfolded image).

Re claim 4: Manique teaches method, wherein the rotation speed is varied during the period in which the two-dimensional recordings of a series are made (col. 6, lines 15-19).

Re claim 6: Manique teaches method, wherein a plurality of series of two-dimensional recordings are made wherein two-dimensional recordings of the same rank from different series are made successively (col. 4, lines 1-28 and 60-64).

Re claim 7: Manique teaches method, comprising steps for comparing the image information from the two-dimensional images of a series to detect the presence of undesired particles in the packaging (col. 4, lines 34-46 and lines 58-64).

Re claim 8: Manique teaches method, wherein the image recording device comprises a camera (CCD array- see Col. 1, lines 39-40) activated to make a two-dimensional recording (col. 3, lines 38-51) by a signal supplied from outside the camera by a rotation generating device (supplied from CCD sequencer board 709 - see Fig. 8 and Col. 12, lines 4-8, 14-20).

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Re claim 14: Manique teaches the radiation (the light emitted from element 614) of the predetermined wavelength contacting the container at an angle greater than 90 degrees and less than 180 degrees from the axis of rotation (see fig. 7).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Manique et al. (US 5523560) in view of Ishikawa (US 5072108).

Re claim 5: Manique teaches method, wherein the rotation speed is varied during the period in which the two-dimensional recordings of a series are made (col. 6, lines 15-19). Manique does not teach varying the direction of rotation. However, Ishikawa discloses an inspection system that rotates a packaging in two directions (see Abstract). It would have been obvious to one of ordinary skill in the art to vary the direction of rotation in Manique as taught by Ishikawa, in order to more accurately detect foreign particles (see Abstract).

5. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manique et al. (US 5523560) in view of Katane et al. (US 2003/0063281).

Re claims 9: Manique teaches the method, wherein during performing of the method a packaging is placed in a holder comprising a drive unit (705 and 710) (see fig. 7), radiating means (614) for generating the radiation. Manique teaches making successive recordings at the same orientation (see Col. 4, lines 58-64) but remains silent regarding a position-determining means for determining the rotational position of the packaging. Katane discloses (fig. 1) a packaging inspection apparatus with position- determining means (9) (page 2, paragraph 0023). It would have been obvious to one of ordinary skill in the art to incorporate a position-determining means in Manique as taught by Katane, to more accurately control the rotation of the packaging.

Re claim 11: Manique teaches system (fig. 7) for performing a method as claimed in claim 1, the system comprising: a rotator for rotating the packaging (see Col. 4, lines 47-54); radiating means (614) for irradiating the packaging during the rotation with radiation of a predetermined wavelength, an a two-dimensional image recording device (632) suitable for making two-dimensional recordings (col. 3, lines 38-51) at the predetermined wavelength for making at least one series of at least two two-dimensional recordings of at least a part of the content of the packaging during the rotation (see Col. 4, lines 58-64). Manique et al. teaches making successive recordings at the same orientation (see Col. 4, lines 58-64) but remains silent regarding a position-determining

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means for determining the rotational position of the packaging. Katane discloses (fig. 1) a packaging inspection apparatus with position- determining means (9) (page 2, paragraph 0023). It would have been obvious to one of ordinary skill in the art to incorporate a position-determining means in Manique as taught by Katane, to more accurately control the rotation of the packaging.

6. Claims 12, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manique et al. (US 5523560).

Re claim 12: Manique teaches a method for inspecting containers for a liquid product (abstract and fig. 7), comprising: setting a container into rotation (col. 3, lines 17-23), irradiating the container during the rotation with radiation of a predetermined wavelength (col. 6, lines 45-50), making at least one series of at least two two-dimensional recordings (col. 3, lines 38-51) of at least a part of the content of the container during the rotation with an image recording device (632) suitable for making two-dimensional recordings at the predetermined wavelength (the unfolded images are two dimensional representations of the one dimensional line scans), wherein the container is situated in substantially the same rotational position relative to the recording device during successive recordings of the series (col. 3, lines 31-37). Manique also teaches the image recording device providing detection an angle ranging from greater than 90 degrees and less than 180 degrees from the container's axis of rotation (see fig. 7). Manique does not teach the image recording device positionable at 90-180 degree angles. It is well known in the art to provide adjustability for a light source

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and for a detector in an optical sensing system, to provide improved versatility and adapt the device for various bottle shapes and configurations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the image recording device positionable at 90-180 degree angles, in the method of Manique et al., as it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

Re claim 13: Manique teaches the radiation (light from the source 614) of the predetermined wavelength contacting the container at an angle greater than 90 degrees and less than 180 degrees from the axis of rotation (see fig. 7). Manique does not teach the image recording device positionable at 90-180 degree angles. It is well known in the art to provide adjustability for a light source and for a detector in an optical sensing system, to provide improved versatility and adapt the device for various bottle shapes and configurations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the image recording device positionable at 90-180 degree angles, in the method of Manique et al., as it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

Re claim 15: Manique teaches the packaging maintained in rotation during the successive two-dimensional recordings (col. 3, lines 38-51) of the series (see Embodiment disclosed in Col. 4, lines 47-51, compared with the alternative embodiment disclosed in Col. 4, lines 52-54).

Response to Arguments

7. Applicant's arguments filed October 15, 2009 have been fully considered but they are not persuasive.

In regards to the Applicant's arguments that Manique does not teach two-dimensional recordings (page 7-8), Examiner respectfully disagrees. As pointed out in the above rejection the successive line scans form a plurality of unfolded images, which are two dimensional representations of the line scans (col. 3, lines 38-51 and col. 4, lines 23-28). Examiner respectfully disagrees with the Applicant that Manique does not teach wherein the packaging is situated in substantially the same rotational position relative to the recording device during the successive recordings (Arguments, page 7 and lines 22-24). Manique teaches creating a plurality of unfolded images with successive revolutions of the container (col. 4, lines 23-28). Manique creates an unfolded image using a line scanning imager by rotating the container 360 degrees (col. 3, lines 38-51). One revolution would be 360 degrees of rotation in which a first unfolded image is taken. After the full rotation the container is placed in the same position for the second unfolded image to be taken. Based on the above argument Manique teaches the claimed invention therefor rejection stands. Also, the Applicant argues that the displacement of foreign bodies is not detected by Manique (Arguments, page 7, and lines 24-25). Examiner respectfully asserts this is irrelevant since there is nothing in the claims that states the Applicant's invention measures the displacement of foreign bodies.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER BENNETT whose telephone number is (571)270-3419. The examiner can normally be reached on Monday - Friday 0730 - 1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/J. B./

/Georgia Y Epps/

Supervisory Patent Examiner, Art Unit 2878